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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,711

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Mark Davison

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EXAMINER

CAJILIG, CHRISTINE T

ART UNIT

PAPER NUMBER

3633

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,711	Applicant(s) DAVISON ET AL.	
	Examiner CHRISTINE T. CAJILIG	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/10/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/10/10 has been entered.

Information Disclosure Statement

The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "edge section comprises an attachment formation[;]...the rear face of the plank...comprises at least one retaining formation...whereby the at least one retaining formation mates with the attachment formation of the adjacent constructional element" as recited in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2, 11, 19, and consequently, dependent claims 3,4,7-17, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 19 recite, "each edge section comprises an attachment formation[;]
for attachment to a mating attachment formation on an adjacent constructional element;
and...the rear face of the plank...comprises at least one retaining formation...whereby
the at least one retaining formation mates with the attachment formation of the adjacent
constructional element." Claims 2 and 19 further recite that the plank has a rear face
and two opposed edge sections, and thus implies that the edge section, and the two
opposed edge sections are distinct elements of the plank. However, it is unclear from
the drawings and the specification how there is a retaining formation in the rear face
that mates with an attachment formation on an edge section *and* also an attachment
formation in each edge for mating with an adjacent attachment formation. From the
disclosure, it appears that lip formation 4b, which mates with an attachment formation
on an edge section 5, is part of the edge section and not the rear face 6 (See page 8,
lines 24-31).

Claims 2 and 19 is further indefinite because the preamble and the body of the
claim appears to be directed to a constructional element *per se*. However, the body of
the claim further recites, "...whereby the at least one retaining formation mates with the
attachment formation of the adjacent constructional element," and implies a plurality of
mated composite constructional elements.

Claim 11 recites that, "*when* the plank profile comprises at least one retaining
formation...the lip comprises one of the retaining formations." However, such a
recitation renders the scope of the claim to be indefinite because claim 2 already
positively sets forth that the plank profile does have at least one retaining formation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

As best understood, claims 2-4, 7-9, 11-17, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poter et al. (U.S. Patent No. 3,906,696) herein "Poter" in view of Tashjian (U.S. Patent No. 2,059,664) herein "Tashjian."

Regarding claims 2 and 19, Poter discloses a composite constructional element comprising: a plank profile (1) defining a rear face; and a cladding material (7) moulded into the plank profile such that it is retained by the rear face and having attachment formations, the cladding material forming substantially an entire front face of the constructional element; wherein the rear face of the plank profile further comprises at least one retaining formation (3a, 3c) shaped to retain the moulded cladding material attached to the plank profile, whereby the at least one retaining formation (3a, 3c) mates with the attachment formation of the adjacent constructional element.

Poter does not disclose that the plank profile defines two opposed edge sections of the constructional element, each edge section including an edge face wherein each edge section comprises an attachment formation for attachment to a mating attachment formation on an adjacent constructional element; nor that the cladding material is also retained by the opposed edge faces.

Tashjian discloses a plank profile that defines a rear face (2) and two opposed edge sections (6/7, 8/9) of a constructional element, each edge section including an edge face, wherein each edge section comprises an attachment formation (7, 9) for attachment to a mating attachment formation on an adjacent constructional element and wherein that a cladding material (1) is retained by the opposed edge faces and the rear face.

It would have been obvious to a person having ordinary skill in the arts at the time of the applicant's invention to modify the structure of Potter to also have the cladding material retained by the rear face and two opposing edge sections with attachment formations as taught by Tashjian to provide the predictable result of adequately supporting and protecting the insulating cladding material. Moreover, the method steps of making the constructional element as recited in claim 19 would be inherent in providing or making the structure discussed above.

Regarding claim 3, Potter modified by Tashjian further discloses that the retaining formations (3a, 3c) are formed adjacent to or as part of the edge sections.

Regarding claim 4, Potter modified by Tashjian further discloses that the retaining formations comprise longitudinal channels of substantially uniform cross section and filled with cladding material, and being shaped in cross section to retain the moulded cladding material attached to the plank profile.

Regarding claim 7, Potter modified by Tashjian further discloses that the attachment formations comprise a frontwardly facing channel (2) formed on one edge section and a rearwardly projecting lip (3) formed on the opposed edge section, wherein

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the lip is capable of clipping into or being retained at a channel of an adjacent constructional element.

Regarding claims 8 and 9, Poter modified by Tashjian further disclose that the lip (3) includes a recess (at 3b) such that, when clipped into or retained at a mating channel of an adjacent constructional element, a recess is defined between a base (2b) of the mating channel and the lip; and wherein the channel projects outwards beyond one edge face, and the lip is formed inwards from the opposed edge face.

Regarding claim 11, Poter modified by Tashjian further discloses that when the plank profile comprises at least one retaining formation (3a, 3c) shaped to retain the moulded cladding material attached to the plank profile, the lip (3) comprises one of the retaining formations.

Regarding claim 12, Poter modified by Tashjian further discloses that the plank profile, including the rear face, the edge sections and the attachment formations, is integrally formed from a sheet material.

Regarding claim 13, Poter modified by Tashjian further discloses that the plank profile is formed from sheet metal (Col 1, Ln 4-5), but not specifically steel. It would have been obvious to one having ordinary skill in the art at the time of invention to use steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Steel would provide a relatively strong load bearing support for the cladding material.

Regarding claims 14 and 20, Poter modified by Tashjian further discloses that the plank profile is roll formed (Col 2, Ln 38-41).

Regarding claim 15, Poter modified by Tashjian further discloses that the plank profile further includes at least one longitudinal stiffening formation comprising a ridge (4).

Regarding claim 16, Poter modified by Tashjian further discloses that the cladding material comprises foamed polymeric material (Col 2, Ln 42-45).

Regarding claim 17, Poter modified by Tashjian discloses the structure discussed above but does not disclose that the cladding material is glass reinforced cement. It would have been obvious to one having ordinary skill in the art at the time of invention to use glass reinforced cement, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Using glass reinforced cement would provide a material with increased impact resistance.

Regarding claim 21, Poter as modified by Tashjian would result in the plank profile being the only mold for molding the cladding panel.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poter modified by Tashjian as applied to claim 9 above, and further in view of Scott (U.S. Patent No. 3,594,028).

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Regarding claim 10, Poter modified by Tashjian does not disclose that the channel is formed of a separate piece with a depending portion embedded in the cladding material.

Scott in Figure 8 discloses that a channel (defined by 43 and 44) is entirely formed as a separate piece of a joint structure and includes a depending portion (38, 40).

It would have been obvious to a person having ordinary skill in the art at the time of the applicant's invention to modify Ting to have the channel formed entirely of a separate piece as taught by Scott to provide the predictable result of facilitating assembly.

Response to Arguments

Applicant's arguments with respect to claims 2-4, 7-17, and 19-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is (571) 272-8143. The examiner can normally be reached on Monday-Thursday, 9 am - 4 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T. C./
Examiner, Art Unit 3633

/Robert J Canfield/
for B. Glessner, SPE of Art Unit 3633